Amendments to the Specification:

Page 34, replace the paragraph, beginning on line 21, with the following amended paragraph:

--~~In the invention defined as claim 1 attached herein, it~~ It is not necessary to send the connection information about the bandwidth of the communication line from the terminal unit. Also, the terminal unit can be comfortably supplied with the various service data to be transferred from the application server.--

Page 34, replace the paragraph, beginning on line 26, bridging pages 34 and 35, with the following amended paragraph:

--~~In the invention defined as claim 2 attached herein, the~~ The data delay time of communication line is calculated from the first round trip time from the second unit to the terminal unit and the second round trip time from the second unit to the first unit. Also, there is provided the communication line bandwidth storing means that stores, in advance, the bandwidth of communication line corresponding to the data delay time of communication line, and the second unit sends data to the terminal unit according to the calculated data delay time. Therefore, in addition to the ~~advantages of the invention in claim 1~~ advantage above, the bandwidth estimation of the communication line connected to the terminal unit can be simply conducted at a relatively high precision.--

Page 35, replace the paragraph, beginning on line 10, with the following amended paragraph:

--~~In the invention defined as claim 3 attached herein,~~ ~~the~~ The bandwidth estimation of the communication line connected to the terminal unit is conducted using the echo request and echo response. Therefore, without modifying the installation status of the terminal unit, the network system of this invention can be easily applied to the existing Internet system.--

Page 35, replace the paragraph, beginning on line 16, with the following amended paragraph:

--~~In the invention defined as claim 4 attached herein,~~ ~~the~~ The application server checks whether the second echo response is from the terminal unit or not. When judged it is from the terminal unit, the application server determines that the estimated number of routers is not correct because the number of routers in the route from the application server to terminal unit is less than the number of routers in the route from the terminal unit to the application server. Then, it sends again the second echo request with the initial counter value of a less value by the re-send control means, thereby measuring the second round trip time. Thus, the bandwidth estimation precision of the communication line connected to the terminal unit can be enhanced.--

Page 35, replace the paragraph, beginning on line 28, bridging pages 35 and 36, with the following amended paragraph:

--~~In the invention defined as claims 5, 6 attached herein, the~~ The processing of the application server can be simplified, thereby the data transfer can be conducted efficiently even in case of a narrow-band line that is likely to be subject the convergence of network. Also, in case of a broad-band line, the terminal unit can receive data more comfortably.--

A5

Page 36, replace the paragraph, beginning on line 6, with the following amended paragraph:

--~~In the invention defined as claims 7 to 9 attached herein, in~~ In a case that the connection processing to be conducted prior to the data transfer from the application server to the terminal unit is conducted in three-way shake hand manner, the connection approval packet of the application server in reply to the connection request packet from the terminal unit is processed as the first echo request and the response packet from the terminal unit to the application server is processed as the first echo response. Thereby, the number of packets communicated in the network can be reduced, therefore the throughput can be enhanced.--

A6